

SCID Added to Newborn Screening Panel

The Montana Public Health Laboratory is pleased to announce that effective July 1, 2015, screening for Severe Combined Immunodeficiency (SCID) has been added to the disorders currently screened in the newborn screening panel. The proposed CPT code for this testing is 81479, and adding SCID screening increased the cost of the newborn screen \$6.00, for a total of \$112.25.

This test will be performed at the Wisconsin Newborn Screening Laboratory that already performs the tandem mass spectrometry testing for Montana. As MTPHL increases the number of disorders that are screened in newborns, it becomes extremely important for the people collecting the dried blood spots to properly fill all 5 circles on the newborn screening collection card.

Severe Combined Immune Deficiency (SCID) is a group of inherited diseases that result in a lack of T-cells and severely reduced B-cell function. The mode of inheritance may be X-linked or autosomal recessive. SCID occurs in approximately 1 in 50,000-100,000 live births. Babies with SCID are extremely susceptible to infection and die early in life unless treated with allogeneic bone marrow transplantation.

The newborn screening methodology uses T-cell Receptor Excision circles (TRECs) as a marker for SCID. TRECs are stable, and can be measured on dried blood spots. Although the test is a DNA test, it does not test for a certain gene, but rather the detection of circular DNA fragments generated during T-cell receptor rearrangement. In healthy neonates, TRECs are made in large numbers, while in infants with SCID they are barely detectable. Confirmatory tests are needed for the diagnosis of SCID and for the determination of the form of SCID.

Results are based on gestational age. NORMAL results are "Normal [> 29 copies/uL]" if the baby is greater than 37 weeks gestation. If the baby has a gestational age less than 37 weeks, the NORMAL result will be "Normal [> 24 copies/uL]". Other possible results include "Possible Abnormal [< 30 copies/uL]", "Possible Abnormal [< 24 copies/uL]", "Probable Abnormal Immunity", and "Inconclusive - Inadequate DNA Amplification". If the first test is Normal, but a repeat test was required for some reason, the SCID TREC assay will not be repeated, and the test will be reported as "Previous Test was Normal".

Wisconsin lab identified the first SCID baby with the help of CDC funded newborn screening!

This baby was successfully treated and is now living a healthy life.

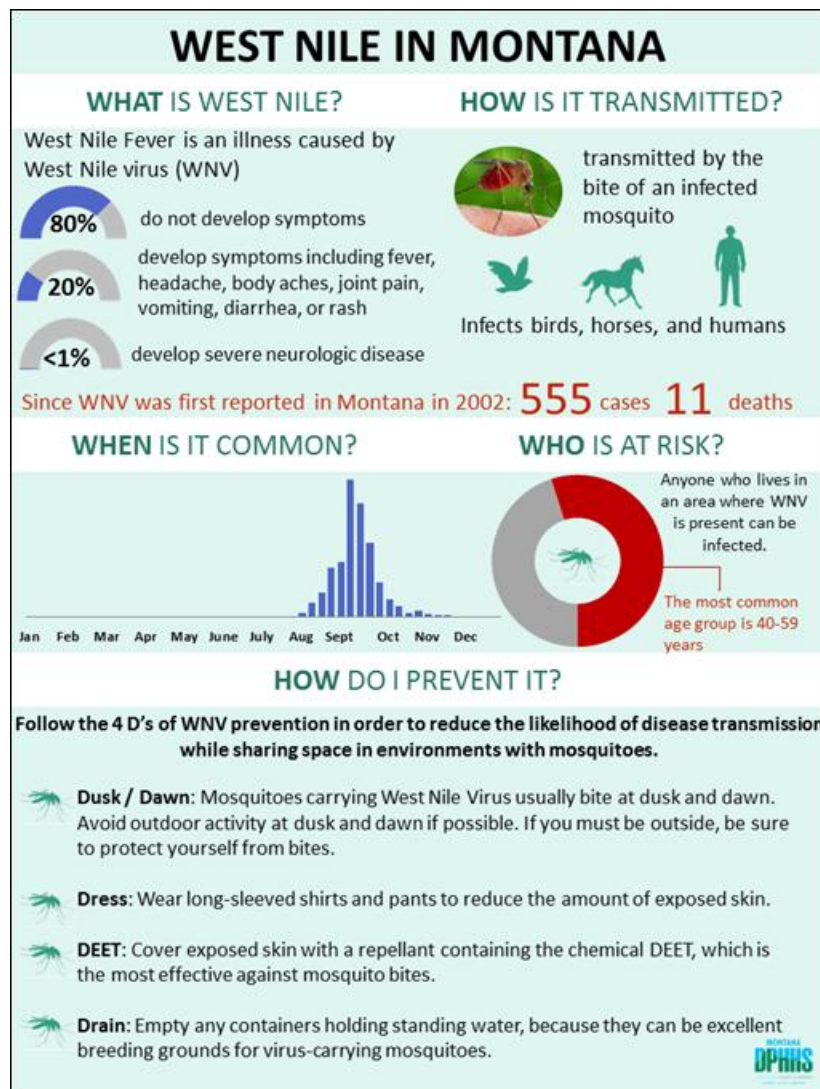
[from the CDC Newborn Screening website](http://www.cdc.gov/newbornscreening/)



Updates from the MT
Laboratory Services
Bureau
800-821-7284

www.lab.hhs.mt.gov





DISEASE INFORMATION

Summary – MMWR Week 25 - Ending 6/27/15 Preliminary disease reports received at DPHHS for the reporting period June 21 – 27, 2015 included the following:

- **Vaccine Preventable Diseases:** Pertussis (8), Varicella (3)
- **Invasive Diseases:** *Haemophilus influenzae* (1)
- **Enteric Diseases:** Campylobacteriosis (8), Cyclosporiasis (1), Salmonellosis (4), Shiga-toxin producing *E. coli* [STEC] (3)
- **STD/HIV:** Chlamydia (57), Gonorrhea (14), Syphilis (0), HIV* (0)
- **Hepatitis:** Hepatitis C, chronic (23)
- **Vector-borne Diseases:** Rocky Mountain Spotted Fever (2)
- **Travel Related Conditions:** Coccidioidomycosis (1), Legionellosis (1)
- **Animal Rabies:** (1, bat)
- **Elevated blood lead:** (2)

** A case is included if a new confirmatory test or report was received by DPHHS. Cases include both persons who were newly diagnosed and persons newly reported in Montana who may have been diagnosed in another state or country.*

NOTE: The attached reports have multiple pages reflecting the following information: (1) cases for the past reporting week; (2) communicable diseases YTD; (3) clusters and outbreaks; and (4) a quarterly HIV/STD summary.

HOT TOPICS

West Nile Virus (WNV): WNV season is in full swing since the identification of the first case of the season this week. A [press release](#) went out yesterday. Be prepared to offer advice on preventing mosquito bites. In addition, and for a historical look at WNV in Montana, review the June 2015 CDEpi Surveillance Snapshot on West Nile Virus located at http://dphhs.mt.gov/Portals/85/publichealth/documents/CDEpi/StatisticsandReports/SurveillanceSnapshots/SS_WNV_June2015.pdf

The 4 D's of WNV prevention should be followed in order to reduce the likelihood of disease transmission while sharing space in environments with mosquitoes.

- | | |
|--------------------|---|
| Dusk / Dawn | Mosquitoes carrying West Nile Virus usually bite at dusk and dawn. Avoid outdoor activity at dusk and dawn if possible. If you must be outside, be sure to protect yourself from bites. |
| Dress | Wear long-sleeved shirts and pants to reduce the amount of exposed skin. |
| DEET | Cover exposed skin with a repellent containing the chemical DEET, which is the most effective against mosquito bites. |
| Drain | Empty any containers holding standing water, because they can be excellent breeding grounds for virus-carrying mosquitoes. |

Brochures will be available later this season. See our banner and link at <http://dphhs.mt.gov/>

Mosquito pools are being tested across the state with no positive pools to date.

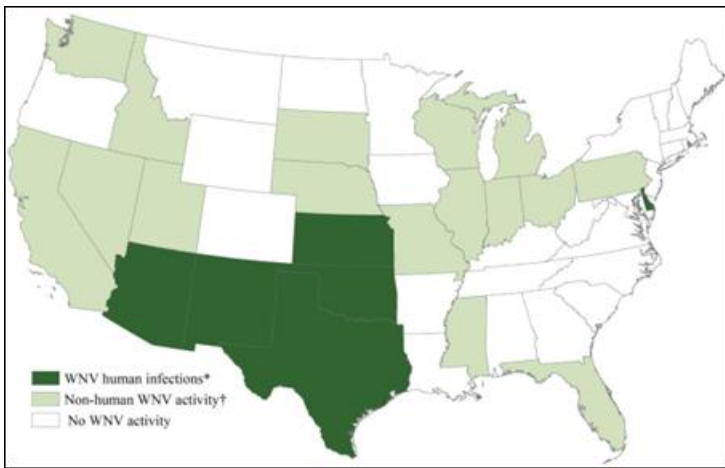
WNV Web Links:

<http://dphhs.mt.gov/publichealth/cdepi/diseases/westnilevirus.aspx>

<http://npic.orst.edu/pest/mosquito/wnv.html>

<http://www.cdc.gov/westnile/index.html>

This is the 8th human case in the country. The map below is current through June 30, 2015.



Cyclosporiasis: This disease, caused by the parasite *Cyclospora*, is often found in tropical regions, but foodborne outbreaks in the U.S. have been linked to fresh produce such as raspberries, snow peas, basil and lettuce ([CDC Factsheet](#)). Very few of these cases have been reported in Montana in the past, but CDC advises that more will be reported through advanced diagnostic technologies. Three cases of cyclosporiasis have been reported in Montana so far this year. CDC is also asking that an additional questionnaire is being used for all cyclosporiasis cases that usually occur between May and August. If you have a case or questions about this condition, please call or email Dana Fejes 406-444-0273 or dfejes@mt.gov.

Campylobacter and Shiga-toxin *E.coli* (STEC): Both conditions have recently been reported at greater frequencies than usually anticipated. In 2015 the number of *Campylobacter* cases that had onset dates in May nearly doubled compared to the 5 year average. Despite local health departments follow up, no epi-links have been identified at this time. *Campylobacter* continues to be a risk factor for those exposed to cattle, which was the likely source of illness for 25% of cases reported in May and June. By the end of June 2015, case counts reached nearly 75% of the anticipated cases reported annually; however, one third of cases have not been confirmed. This percentage has increased from the 20% of cases that were not able to be grown in culture in past years, but due to change of case definition are now counted in summary statistics.

Lately, a lot of STEC O26 have been reported, but no pulse field electrophoresis (PFGE) match has been identified. Interestingly, STEC O157 has not been the leading cause of STEC in years. In fact, since 2011 the most commonly diagnosed serotype is STEC O26, followed by O157 and then O121. It is possible that because of new diagnostic methods, clinical laboratories are capturing more cases that were often not detected in standard O157-specific culture methods. Halfway through 2015, Montana has already reported 32 cases of STEC (this includes a family cluster of 4 confirmed). This reaches 80% of the average of 40 cases reported annually.

The increase in reporting for these enteric conditions is likely due to enhanced diagnostic methods and not as a result of an outbreak. This allows public health investigators to be more likely to identify possible outbreaks and increase the surveillance capabilities to detect outbreaks in Montana.

INFORMATION/ANNOUNCEMENTS

Quarter 2 Reconciliation: The second quarter for disease reporting ended on June 30. Please take some time during the next 2 weeks to review cases entered into MIDIS between April 1 and June 30 to make sure that they are complete. Your next reconciliation report will be sent the week after Summer Institute.

(REMINDER) NEW 2015 STD treatment Guidelines: The National Centers for Disease Control and Prevention (CDC) has recently released the 2015 STD Treatment Guidelines which include updated testing, treatment and diagnosis recommendations. The Montana Department of Public Health and Human Services (DPHHS) use Administrative Rules of Montana (ARM) to enforce CDC recommendations. The current ARM regarding STD treatment specifies that CDC's 2010 STD treatment guidelines be followed. DPHHS will continue to abide by the 2010 guidelines until the ARM is updated in the summer of 2015 but encourage you to become familiar with the new guidelines expected to be adopted this

summer.. The new guidelines, including a handy pocket guide that makes a great gift, can be found at: <http://www.cdc.gov/std/tg2015/default.htm>

Summer Institute (Free “NEW” Redbooks to Attendees/\$140 value): We urge all communicable disease epidemiology staff at local levels to sign up.



Registration Open

Online registration and electronic payment is now open. You will have the ability to pay the conference fee at the time of registration by either credit card or electronic check.

Go to mphti.mt.gov to review the courses and find the link to register, or click [HERE](#) to go directly to the registration.

\$100 Conference Fee per Person

- Courses of your choice
- Leadership Day workshops
- Wednesday luncheon

Reserved Sessions Full

The open preregistration spots for A. Public Health Management Certificate and C. Passport to Partner Services are filled and the courses are no longer available.

Accommodations

All participants are responsible for their own lodging, but the Holiday Inn Downtown has blocks of rooms for Summer Institute participants open from **June 1 to June 19**. Any accommodation arrangements after June 19 will be more difficult. The summer is a busy time for area hotels, so please book a room early. Check the website occasionally for updates. When booking a room at the Holiday Inn Downtown – Missoula, be sure to mention the DPHHS Summer Institute Block.

Click [HERE](#) to book online or call 1-800-345-8082 or 1-406-721-8550.

Q&A CORNER

Q: I can't get into MIDIS! Is the system down?

A: The MIDIS system was upgraded and moved to a new server last weekend. The new URL to access MIDIS is <https://midis.hhs.mt.gov> You should have received an email with the new URL on Monday. If you did not receive an email, you will want to check the MT Public Health Directory to be sure that your MIDIS users and contact information are all up to date.

Q: When I enter an elevated blood lead investigation into MIDIS and complete a notification, the system says “MSG_FAIL”. Did I do something wrong?

A: Elevated blood lead cases are reportable to DPHHS but are not sent to CDC through MIDIS. The system unfortunately used wording that is not very clear. Please do not worry about MSG_FAIL for lead investigations. You can rest assured that they are received by CDEpi.

24/7 AVAILABILITY

The Communicable Disease Epidemiology (CDEpi) Program is available 24 hours a day, 7 days a week, 365 days a year, to assist local health jurisdictions. Local providers should call, including after normal business hours, their local health jurisdiction. The CDEpi 24-hour line is available as a back-up to the local health jurisdiction's 24-hour line. If you need CDEpi assistance, please call 406.444.0273. Phone calls to this number outside of normal business hours will be answered by the answering service. The answering service will immediately forward the message to CDEpi, and we will respond as quickly as possible.

Local health jurisdictions, please ensure that your local providers have your 24/7/365 contact information. And please inform CDEpi or the Public Health Emergency Preparedness Program of updates to your required 24/7 contact information.

This update is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: <http://dphhs.mt.gov/publichealth/cdepi>